EUROPA Installation

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Currently, EUROPA is only available as a source distribution and you will have to build it yourself. This page outlines steps needed to get EUROPA built and running on your system.

Supported Platforms

EUROPA is currently supported on RedHat Linux, Mac OS, and Solaris. Some users have been able to run EUROPA on Windows using cygwin, this is not officially supported yet, but we are planning to add support for it in the near future.

A platform is officially supported if and only if there is an automated build regularly scheduled for it. You can see details of the environments used for the automated builds here.

Software Requirements

To begin with, you will need the following software installed on your system:

- Jam 2.5 - An automated build system *(replacement for* `make`*)*
- Java 1.5 - A platform independent programming language and runtime.
- Ant - A Java-based build tool.
- Doxygen - An automated documentation generator. *(required only to generate API documentation)*

The following software is also required, but is likely already installed on your system:

- Subversion - version control system.
- GCC 3.3+ - GNU Compiler Collection.
- Perl - A general purpose scripting language, used for some utility scripts in PLASMA. *(not strictly required)*
- SWIG - Tool that allows us to expose C++ interfaces in Java and other languages

While not currently officially supported, EUROPA should run on Windows:

- Cygwin - A POSIX environment for Microsoft Windows.

Checkout

Checkout the two EUROPA packages (PlanWorks contains the PlanWorks and PSUI visualization tools, while PLASMA contains the core EUROPA software). In the desired directory, run:

```
svn co https://babelfish.arc.nasa.gov/svn/europa/PlanWorks/trunk/ PlanWorks
svn co https://babelfish.arc.nasa.gov/svn/europa/PLASMA/trunk/ PLASMA
```

Environment Configuration

The following environment variables are needed to build and run EUROPA (shown here added to ~/.bashrc, assuming that PLASMA was checked out in the /home/tsmith/svn directory):

```
export ANT_HOME=/home/tsmith/eclipse/plugins/org.apache.ant_1.7.0.v200706080842
export JAVA_HOME=/home/tsmith/programs/jdk1.6.0_03  # the directory where you installed Java
export PLASMA_HOME=/home/tsmith/svn/PLASMA          # wherever you checked out PLASMA
export PLANWORKS_HOME=/home/tsmith/svn/PlanWorks    # wherever you checked out PlanWorks
export LD_LIBRARY_PATH=$PLASMA_HOME/lib:.           # DYLD_LIBRARY on a Mac
```

You may also need to add the 'jam' and 'ant' executables to your path:

```
export PATH=$PATH:$ANT_HOME/bin:/home/tsmith/programs/jam
```

Build

To build EUROPA, simply run (Note that this will take a while):

```
% cd $PLASMA_HOME
% jam
```

This creates a debug version of EUROPA. For an optimized version, run:

```
% jam -sVARIANTS=OPTIMIZED
```

For more build configuration details and options, see the Build Configuration page.

If desired, Doxygen API documentation can be run by following the directions here.

Troubleshooting

To see if you have the necessary software requirements, run:

```
% cd $PLASMA_HOME
% checkreqs
```

If you have any trouble, please Contact the EUROPA team.